

BAINBRIDGE ISLAND CITY HALL

CASCADIA REGION GREEN BUILDING COUNCIL



FLOOR SPACE: 24,000 ft²

BUDGET: \$4.5 million (\$188/ft²)

BUILDING POPULATION: 80

CONSTRUCTION DATES: 1999-2001

OWNER: Bainbridge Island

ARCHITECT: Miller/Hull Partnership

CONSTRUCTION MANAGER: Elmquist Associates

GENERAL CONTRACTOR: Columbia Pacific

STRUCTURAL ENGINEER: KPFF Consulting Engineers

MECHANICAL ENGINEER: Greenbusch Group

CIVIL ENGINEER: SvR Design Company

ELECTRICAL ENGINEER: Sparling

ENVIRONMENTAL CONSULTANT: O'Brien & Company

LANDSCAPE ARCHITECT: Cascade Design Collaborative

PROJECT NOTES

SITE AND WATER

- **Land improvement:** Site was previously a gas station and gravel parking lot. Development of the site included hazardous waste cleanup of empty tanks and contaminated soil.
- **Vegetation:** The landscaping emphasizes native vegetation, reducing pesticide and water use.
- **Impacted area:** Flexible systems and interior spaces allow a smaller building footprint, and house a wider variety of uses more easily adaptable to future needs.
- **Paved surfaces:** Porous paving for mixed-use parking lot increases groundwater filtration, improving water quality and decreasing the load on the storm system.

ENERGY AND ATMOSPHERE

- **Natural light:** Skylights, big windows, an open floor plan and light colored interiors reduce the need for electric lighting throughout the space.
- **Cooling:** Large overhangs, operable windows and an open office plan help minimize and mitigate heat gain through the windows, decreasing the load on the cooling system.
- **Lighting:** Multiple switching of energy efficient lights allows occupants to control lights in various zones as needed and keep energy use down when lights are on.

MATERIALS AND RESOURCES

- **Recycled materials:** Sustainable building materials include fiberglass insulation with 25% recycled content glass, GWB with 18% recycled content gypsum, acoustical

tile with 69% recycled content fiber and 100% recycled content plastic toilet partitions and locker room benches.

- **Wood:** Used FSC-certified lumber for 70,000 board feet of framing wood to avoid cutting old-growth forests. Also, glulams provided the heavy timber aesthetic of the project without the use of huge trees.
- **On-site recycling:** Concrete and asphalt waste recycled during site development and saved materials and energy used to manufacture and dispose of the material.
- **Carpet:** Recyclable carpet can be converted to new product at the end of its service life.
- **Siding:** Resource-efficient fiberboard siding translates into longer life and lower maintenance requirements.

INDOOR ENVIRONMENTAL QUALITY

- **Finishing materials:** Low-VOC and non-toxic paints, stains and flooring adhesive, as well as FDA-approved wood treatment were used rather than the standard alternatives.
- **Carpet:** Flooring exceeds Washington State Indoor Air Quality Standards (minimal off-gassing) and adhesives were selected for non-toxic attributes.
- **Occupant comfort:** Operable windows and hot air exhaust high in the space contribute towards better air quality by allowing the fresh air from outside to circulate easily through the building.
- **Natural light:** Sunlit office spaces create a more positive and open work environment.

BAINBRIDGE ISLAND CITY HALL

With its five departments spread out in different buildings, Bainbridge Island's city government decided that it was time to build a new city hall to bring the different agencies under one roof. This first idea of efficient use was expanded to encompass sustainability goals at every level, culminating in a project that pushed the envelope on green building in the Northwest.

Pre-design meetings were held to determine how to meet the parking demands of three shared-site users: the city hall, an existing performing arts center and a Saturday market. Stormwater improvements were considered for an area beyond the project and the city hall project was used to fix an overburdened existing system. In addition, design team members did a thorough tour of the island looking for historical inspiration and were ultimately influenced by water towers, agricultural heritage, gardens, windows, and siding that was milled on the island.



CERTIFIABLY GOOD

The entire framing package for the building (70,000 board feet) was supplied out of wood certified by the Forest Stewardship Council. Certification assures that that wood comes from a well-managed and responsibly harvested forest. The Bainbridge Island City Hall was the first major building project in the Northwest to use certified lumber, and has therefore served as a model for other public bodies to implement across-the-board changes to their specification systems.

Because the owners were worried about the cost of certified wood, conventional wood was bid as an alternate. In the end, the cost increase for using certified wood was \$8,000, a price that the City could readily justify for its other benefits.

LETTING THE SUNSHINE IN

Through a series of measures, the city hall has also become a regional model for its efficient and attractive methods of indoor lighting. Natural light is allowed into the office as much as possible through the use of side-lighting with deep interior penetration, skylights and an open floor plan. The interior color scheme uses light shades to further reflect natural light as much as possible. In addition to these energy-saving features, the building's lighting is all set with variable-level switching to use only as much electricity as necessary. The use of natural light helps out a lot with the electricity bill, and contributes to a more comfortable workplace in general.

AWARDS AND HONORS

- 2001 MERIT AWARD, AIA NW & PACIFIC REGION
- 2000 HONOR AWARD, AIA SEATTLE CHAPTER
- 2000 HONOR AWARD, AIA WASHINGTON CIVIC DESIGN AWARDS
- 2000 EARTH DAY TOP 10 NATIONAL PROJECTS, AIA/BEST EXAMPLES OF ENVIRONMENTALLY RESPONSIBLE DESIGN

CASE STUDY SPONSORED BY:

		O'Brien & Company	
		Interface Engineering	
		Glumac International	

